UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/043,325	01/14/2002	Young-Won Song	HI-0070	6678

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EXAMINER
BHATIA, AJAY M

ART UNIT	PAPER NUMBER
2145	

DATE MAILED: 04/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)
Office Action Summary		10/043,325	SONG ET AL.
		Examiner	Art Unit	
		Ajay M. Bhatia	2145	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on _29 March 2006_.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) _24-42_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) _24-42_ is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some *   c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

Response to Arguments

Applicant's arguments with respect to claims 24-26, and 28-41 have been considered but are moot in view of the new ground(s) of rejection. Applicant has filed an RCE 2/16/2006. Applicant has submitted new claims. An submitted supplemental amendment filed 3/29/06 which is addressed bellow.

Examiner thanks applicant's representative for conducting the interview.

Priority

Applicant is required to provide translation of foreign priority paper to help resolve issue with 112 rejection and provide additional clarification of the specification in addition to provide priority of the current invention over the document provided in the Notice of References Cited.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 24-26, and 28-41 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter that was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the

invention. At present the specification fails to show how the data structures are

generated recursively. Therefore the examiner assumes from the specification that the

intended meaning is what is commonly accepted for the creation of data structures.

Claim 24 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply

with the enablement requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to enable one skilled in the art to which it

pertains, or with which it is most nearly connected, to make and/or use the invention.

Recurrent is not currently supported by the specification. The specification does discuss

the term recurrent but it refers to the structure of the Digital Item not how the item is

constructed.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

Claims 24-26, and 28-41 are rejected under 35 U.S.C. 112, second paragraph,

as being indefinite for failing to particularly point out and distinctly claim the subject

matter which applicant regards as the invention. The claims are generally narrative and

indefinite, failing to conform with current U.S. practice. They appear to be a literal

translation into English from a foreign document and are replete with grammatical and

idiomatic errors.

Claims 24-26, and 28-41 are rejected under 35 U.S.C. 112, second paragraph,

as being incomplete for omitting essential structural cooperative relationships of

elements, such omission amounting to a gap between the necessary structural

connections. See MPEP § 2172.01. The omitted structural cooperative relationships

are: applicant fails to clear define the relationship between item container and

component and there relationship to the digital item, types of components or items do

not provided any clear definition to as the content of those types of objects.

Claims 24-26, and 28-41 are rejected under 35 U.S.C. 112, second paragraph,

as being incomplete for omitting essential elements, such omission amounting to a gap

between the elements. See MPEP § 2172.01. The omitted elements are: are the

features of the data structure, as defined by the specification different parts of the data

structure are disclose though out the claims from the applicant's specification each part

is necessary for the data structure to operate according to the specification.

Where applicant acts as his or her own lexicographer to specifically define a term

of a claim contrary to its ordinary meaning, the written description must clearly redefine

the claim term and set forth the uncommon definition so as to put one reasonably skilled

in the art on notice that the applicant intended to so redefine that claim term. *Process

Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed.

Cir. 1999). The term "recursive" in claims 24-42 is used by the claim to mean

"encapsulation", while the accepted meaning is "subroutine or program module to call

itself." The term is indefinite because the specification does not clearly redefine the

term. At present if the accepted meaning is used the present invention is inoperative.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 24-26, and 28-41 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-34 of copending Application No. 10/102,895. Although the conflicting claims are not identical, they are not patentably distinct from each other because they both disclose the same Digital Item.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 24-26, and 28-41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. "A method of generating" does not provide for a change of state of transformation of physical matter.

Claims 24-26, and 28-41 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Data-structures not contained in a storage medium are not patentable, software is not patentable by itself.

Claims 24-26, and 28-41 are rejected under 35 U.S.C. 101 because the claimed invention lacks patentable utility. At present the claims fail to produce a concrete, useful and tangible result.

Claims 24-26, and 28-41 are rejected under 35 U.S.C. 101 because the disclosed invention is inoperative and therefore lacks utility. At present the data structure is generated recursively, which the data structure is not a sub routine therefore it is not able to call a not copy of the same object. Therefore it is inoperative.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (f) he did not himself invent the subject matter sought to be patented.

Claims 24-26, and 28-41 are rejected under 35 U.S.C. 102(f) because the

applicant did not invent the claimed subject matter. At present multiple documents

retrieved from ISO standard list additional inventors that are not listed in the current

application.

Claims 24-26, and 28-41 are rejected under 35 U.S.C. 102(b) as being

anticipated by (MPEG-21) Part1 (ISO/IEC JTC1/SC29/WG11 N 3500). (Date 2000-09-

03) (Please not the date provided is more then 1 year prior to the filing in the United

State)

For claim 24, (MPEG-21) teaches, a method of generating Digital Items for

electronic commerce activities of multimedia data, comprising:

selecting a resource for electronic commerce activates of multimedia data;

((MPEG-21), page iix)

generating and storing and/ pr transmitting an atomic Digital Item for the

resource which is not further divided and a packaged Digital Item, wherein the

packaged Digital Item is defined to include any sub packaged Digital Item in a recurrent

package form in which the atomic Digital Item is packaged or already package Digital

Item are again packaged, therefore each packaged Digital Item is generated in a

recurrent manner; ((MPEG-21), page ix)

wherein in order to construct the recurrent layered structure of the Digital Items,

the atomic Digital Item as a lowest layer is defined as component, the packaged Digital

Item as a middle layer is defined as item, and /or packaged Digital Items as a highest

layer is the defined as container; ((MPEG-21), page ix)

and generating the component, the component is defined to include the

selected resource, an anchor for designating the selected resource, optionally a

descriptor for describing details of the resource, and optionally an opCondition for

describing operational use conditions of the resource, ((MPEG-21), pages 12-32 and

41-43)

wherein the packaged Digital Item is defined to include an anchor for

designating the same level of Digital Item or an anchor for designating lower a level of

Digitial Item, such that in of generating the item, the item is defined to include packaged

content including at least one component or item or anchor, and optionally a choice for

the packaged content; ((MPEG-21), pages 12-32 and 41-43)

and optionally a descriptor for describing details of the packaged content;

((MPEG-21), pages 12-32 and 41-43)

and/or in of generating the container, the container is defined to include

packaged content including at least one item or container or anchor, and optionally a

descriptor for describing details of the packaged content. ((MPEG-21), pages 12-32 and

41-43)

For claim 25, (MPEG-21) teaches, the method according to claim 24, wherein the

anchor used for all Digital Items is denied to include a reference being a identifier

designating uniquely a Digital Item, at least zero or more descriptor for describing the

anchor, and at least zero or more opCondition for describing a usage format of the

anchor. ((MPEG-21), pages 12-32 and 41-43)

For claim 26, (MPEG-21) teaches, the method according to claim 25, wherein

opCondition used for anchor defines operational use conditions for corresponding item

by use of at least one or more predicate which is Boolean function.

For claim 28, (MPEG-21) teaches, the method according to claim 24, wherein

generating the component is defined to include selectively a murCondition for describing

condition related to management and use rule for the resource, an eventReport for

describing an event to be reported in connection with the resource, a userPerference for

describing user preference information on the resource, or a reservedMetadata for

describing metadata additionally required for a future Digital Item definition model.

((MPEG-21), pages 12-32 and 41-43)

For claim 29, (MPEG-21) teaches, the method according to claim 28, wherein the

UserPreference is defined to include an anchor for designating existing user preference

information, a descriptor for describing content of the user preference information, and

murCondiion capable of describing a management and use rule of the user preference

information. ((MPEG-21), pages 12-32 and 41-43)

For claim 30, (MPEG-21) teaches, the method according to claim 28, wherein the murCondition used for all the Digital Items, eventReport, userPreference, and reservedMetadata defines conditions for a management and use rule of a corresponding Digital Item or definition model elements by use rule of corresponding Digital Item or definition model elements by use of at least one or more predicate which is Boolean function representation language. ((MPEG-21), pages 12-32 and 41-43)

For claim 31, (MPEG-21) teaches, the method according to claim 29, wherein the opCondition describes conditions, including at least one transmission bit rate, resolution or video or image, sampling rate of audio, compression algorithm, key or decoding conditions if coded and transmission protocol. ((MPEG-21), pages 12-32 and 41-43)

For claim 32, (MPEG-21) teaches, the method according to claim 24, wherein generating the item is defined to include selectively a murCondition for describing conditions related to a management and use rule for the packaged content, an eventReport for describing an event to be reported in connection with the packaged content, a userPreference for describing user preference information on the packaged content, or a reservedMetadata for describing metadata additionally require for a future Digital Item definition model. ((MPEG-21), pages 12-32 and 41-43)

For claim 33, (MPEG-21) teaches, the method according to claim 32, wherein the eventReport is defined to include an anchor for designating a server computer for

processing, managing and storing content of a reportable event report, a descriptor for

describing the content of the event report, and a murCondition for describing conditions

related to a management and use rule of the event report content. ((MPEG-21), pages

12-32 and 41-43)

For claim 34, (MPEG-21) teaches, the method according to claim 24, wherein

generating the container is defined to include selectively a murCondition for describing

condition related to a management and use rule of the packaged content, an

eventReport for describing an event to be reported in connection with the packaged

content, an userPrefernce for describing user preference information on the packaged

content, or a reservedMetadata for describing metadata additionally required for a future

Digital Item definition model. ((MPEG-21), pages 12-32 and 41-43)

For claim 35, (MPEG-21) teaches, the method according to claim 24, wherein the

choice is defined to include a recurrent form of at leas zero or more choice, at least zero

or more descriptor, at least zero or more opCondition that can be used to determine

whether a single selection is selected or more than on selection are selected, and at

least one or more selection as the object of selection. ((MPEG-21), pages 12-32 and

41-43)

For claim 36, (MPEG-21) teaches, the method according to claim 35, wherein the

selection is defined to include predicate which is Boolean function representation

language, at least zero or more descriptor for describing the content of the selection, and opCondition for describing operational use condition of the selection, as elements included to define the choice. ((MPEG-21), pages 12-32 and 41-43)

For claim 37, (MPEG-21) teaches, the method according to claim 24, wherein the choice is used for item level for the purpose of selective item configuration in order to adapt the Digital Item according to the various types of network and terminals, or the user request, and wherein the choice is modeled in a recurrent form considering the user generally configures item through mutli-step, so layered definition of choice is required. ((MPEG-21), pages 12-32 and 41-43)

For claim 38, (MPEG-21) teaches, the method according to claim 24, wherein a descriptor used for all the Digital Items, choice, selection, eventReport, userPrederence, reservedMetadata, and anchor, is defined to include at least zero or more existing descriptors or anchor, a component capable of representing the content of the descriptor or statement of text or any machine readable format for describing the content including parent element of the descriptor to be defined, and at least zero or more opCondition of describing operation conditions of descriptor. ((MPEG-21), pages 12-32 and 41-43)

For claim 39, (MPEG-21) teaches, the method according to claim 24, wherein the anchor used for all Digital Item, eventReport, userPreference, reservedMetadata, and

descriptor, is defined to include a reference being and identifier designating a uniquely

atomic Digital Item and each Digital Item at, least zero, or more descriptor for describing

the anchor, an at least zero or more opCondition for describing usage format of the

anchor. ((MPEG-21), pages 12-32 and 41-43)

For claim 40, (MPEG-21) teaches, the method according to claim 24, wherein the

opCondition used for a Digital Item of the component level, descriptor, anchor, choice,

and selection defines operational use conditions for corresponding item or definition

model elements by use of at least one ore more predicate which is Boolean function

representation language. ((MPEG-21), pages 12-32)

For claim 41, (MPEG-21) teaches, the method of according to claim 24, wherein

container item and component are generated as Digital Item in order to provide a

selected resource as the unit of manipulation for electronic commerce activites accordin

to the following element definitions:

(a)container::=(anchor.vertline.container)* (anchor.vertline.item)*

descriptor* murCondition* eventReport* userPreference* reservedMetadata*

(b)item::=(anchor.vertline.item.vertline.component)+choice* descriptor* murCondition*

eventReport* userPreference* reservedMetadata* (c)component::=resource anchor

descriptor* murCondition* opCondition* eventReport* userPreference*

reservedMetadata* (d) anchor::=reference descriptor* opCondition* (e)

descriptor::=(anchor.vertline.descriptor)* (component.vertline.statement) opCondition*

(f) choice::=choice* selection+descriptor* opCondition* (g) selection::=predicate

descriptor* opCondition* (h) eventReport::=anchor descriptor murCondition (i)

userPreference::=anchor descriptor murCondition (j) reservedMetadata::=anchor

descriptor murCondition (k) murCondition::=predicate+(l) opCondition::=predicate+

((MPEG-21), pages 12-32)

wherein `*` means at least zero(0) or more, `+` means at least one(1) or more,

and `.vertline.` means `OR` logical operation. ((MPEG-21), pages 12-32)

Conclusion

The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. See attached Notice of references cited (if appropriate).

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Ajay M. Bhatia whose telephone number is (571)-272-

3906. The examiner can normally be reached on M-F 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Jason Cardone can be reached on (571)272-3933. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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